

Agri-Food Structure, Trade and Policies in Indonesia

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Outline of Presentation

1. The rise and fall of Indonesia agriculture
2. Food and agribusiness sector
3. Domestic food consumption habits
4. International trade of agri-food sector
5. The way forward: Policy agenda

Map of Indonesia



The Rise & Fall of Indonesian Agriculture

- All sub-sectors: food crop, cash crop, livestock, fishery show significant increase, more rapidly in the 1980s, but slower in 1990s, and post economic crisis of this century.
- Sources of agricultural growth: land area expansion, technological change (Green Revolution), infrastructure development (irrigations, roads, bridges) and public goods (research, extensions, etc.);
- Agriculture suffers very much during the economic crisis, but now recovered albeit slowly. Growth rate of 3.4% is far below the record high of nearly 6% in the 1980s.

Phases of Agricultural Growth (%)

Sub-sector	Conso- lidation 1967-78	High Growth 1978-86	Decons truction 1986-97	Crisis Period 1997-00	Decentra lization 2001-06
Agricultural GDP	3.39	5.72	3.38	1.57	3.45
➤ Food Crops	3.58	4.95	1.90	1.62	2.63
➤ Cash Crops	4.53	5.85	6.23	1.29	4.10
➤ Livestock	2.02	6.99	5.78	-1.92	4.47
➤ Fisheries	3.44	5.15	5.36	5.45	4.20

Source: Calculated from BPS dan FAO

Agricultural Policy: Leadership matters

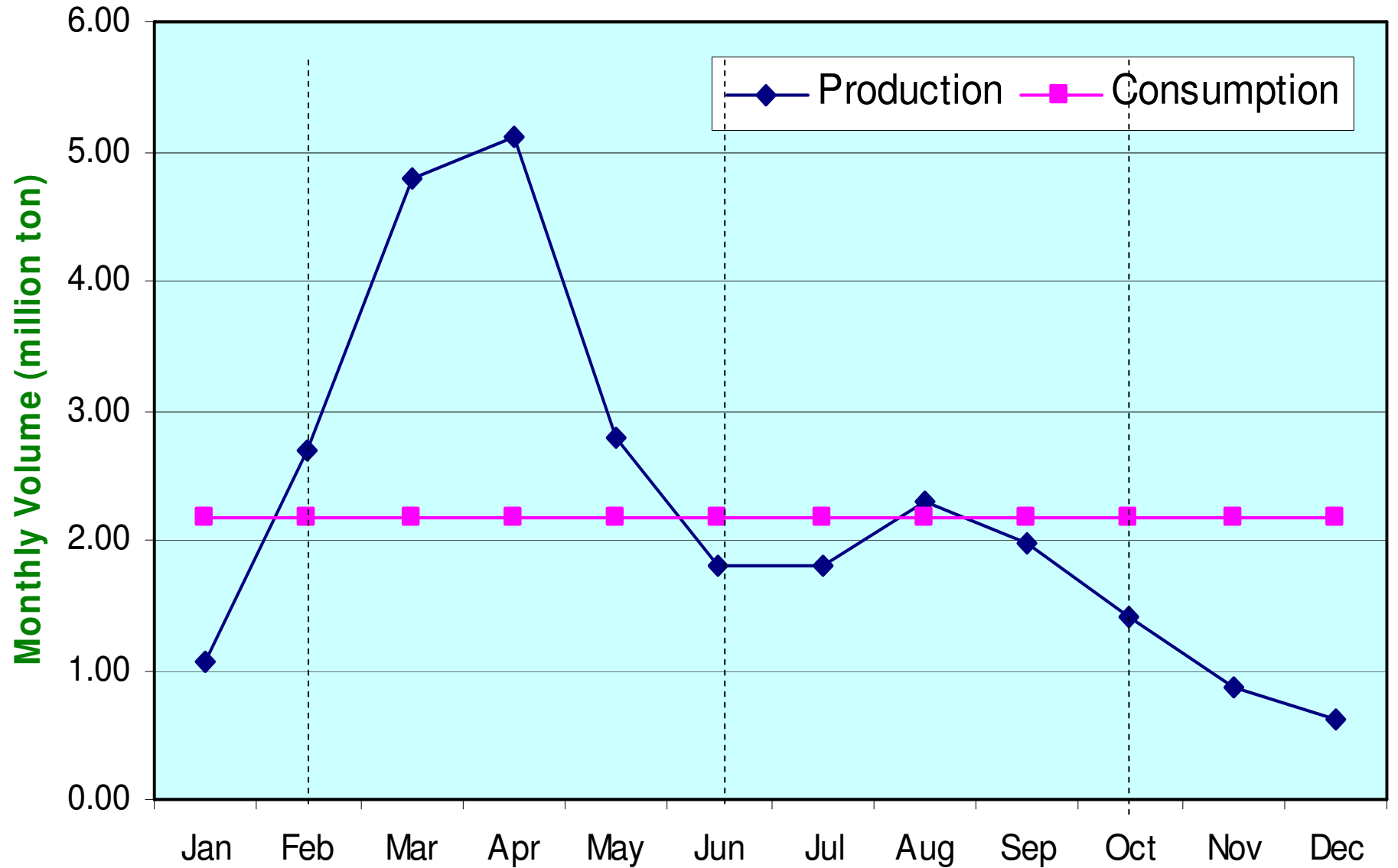
- . Previous administrations: Food security strategy
- . Current Administration: Revitalizing agriculture



The Rice Economy: Remains political

Year	Harvested Area (ha)	Productivity (ton/ha)	Production (ton)	Growth (%)
2002	11.521.166	4,469	51.489.694	2,04
2003	11.488.034	4,538	52.137.604	1,26
2004	11.922.974	4,536	54.088.468	3,74
2005	11.839.060	4,574	54.151.097	0,12
2006	11.786.430	4,620	54.454.937	0,56
2007*)	11.757.845	4,689	55.127.430	1,23

Seasonal Pattern of Rice Harvest



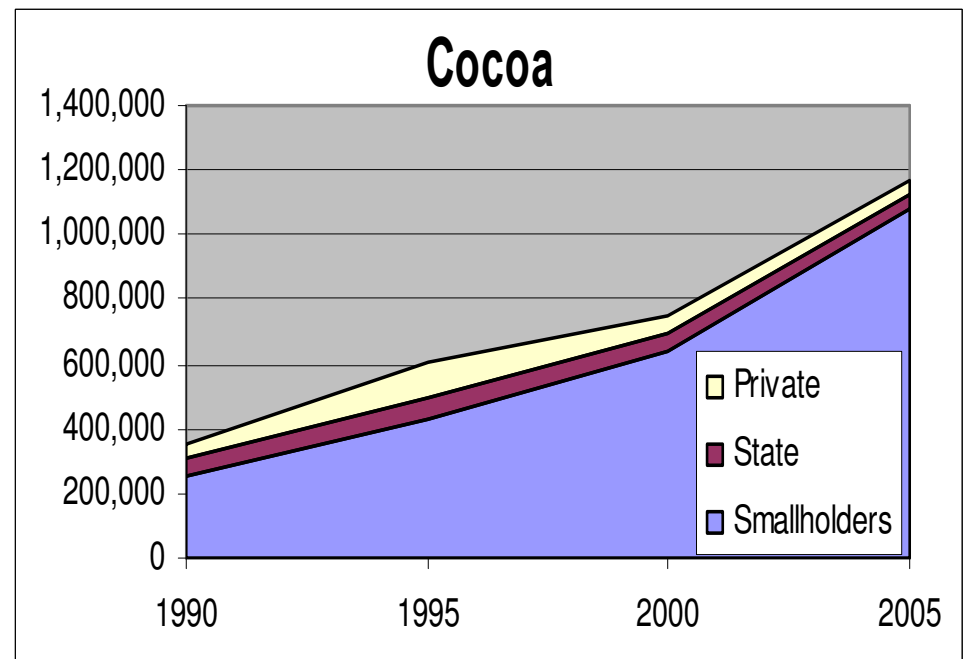
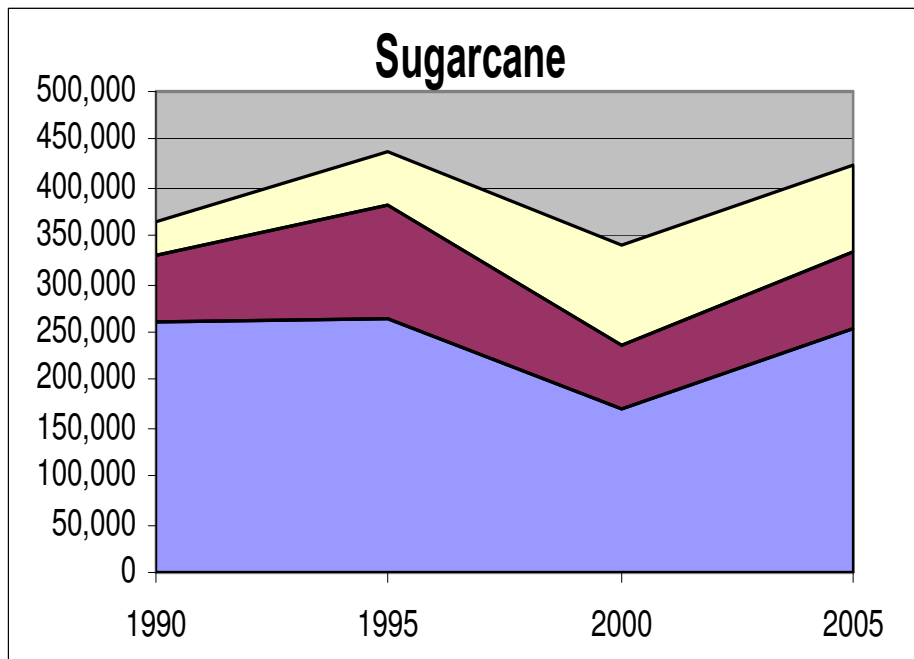
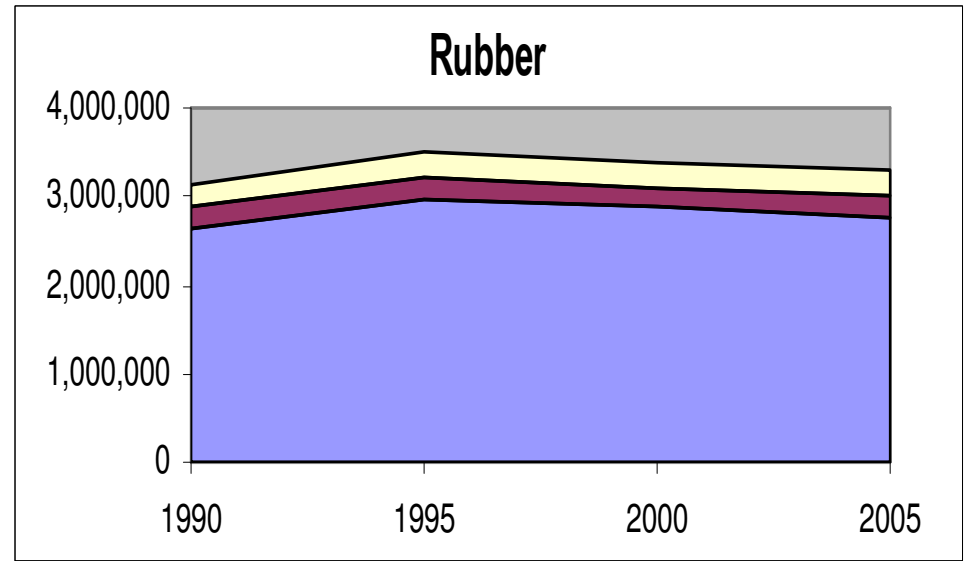
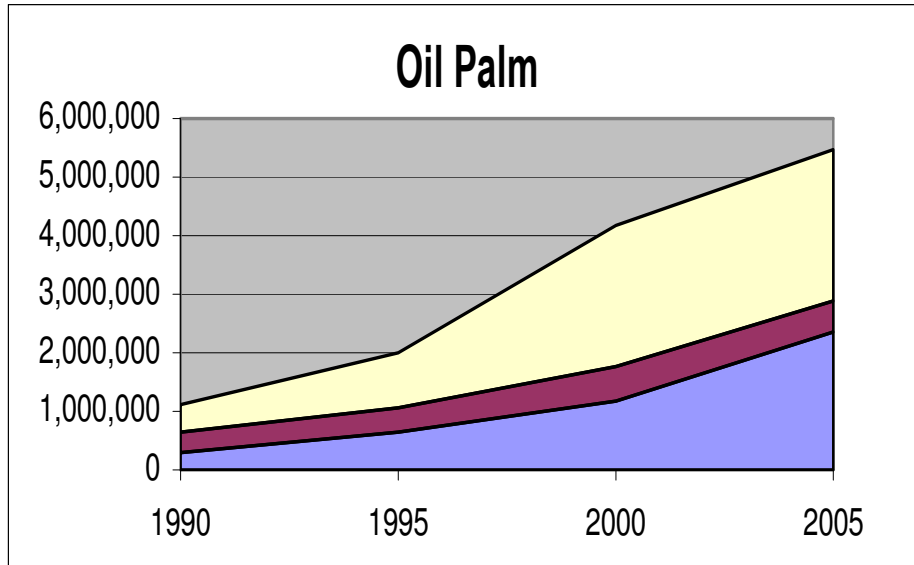
Production of Secondary Foodcrops (ton)

Year	Maize	Soybean	Groundnut	Mungbean	Cassava	Sweet Potato
2002	9.654.105	673.056	718.071	288.089	16.913.104	1.771.642
2003	10.886.442	671.600	785.526	335.224	18.523.810	1.991.478
2004	11.225.243	723.483	837.495	310.412	19.424.707	1.901.802
2005	12.523.894	808.353	836.295	320.963	19.321.183	1.856.969
2006	12.495.742	783.554	851.133	311.623	20.054.634	1.868.990

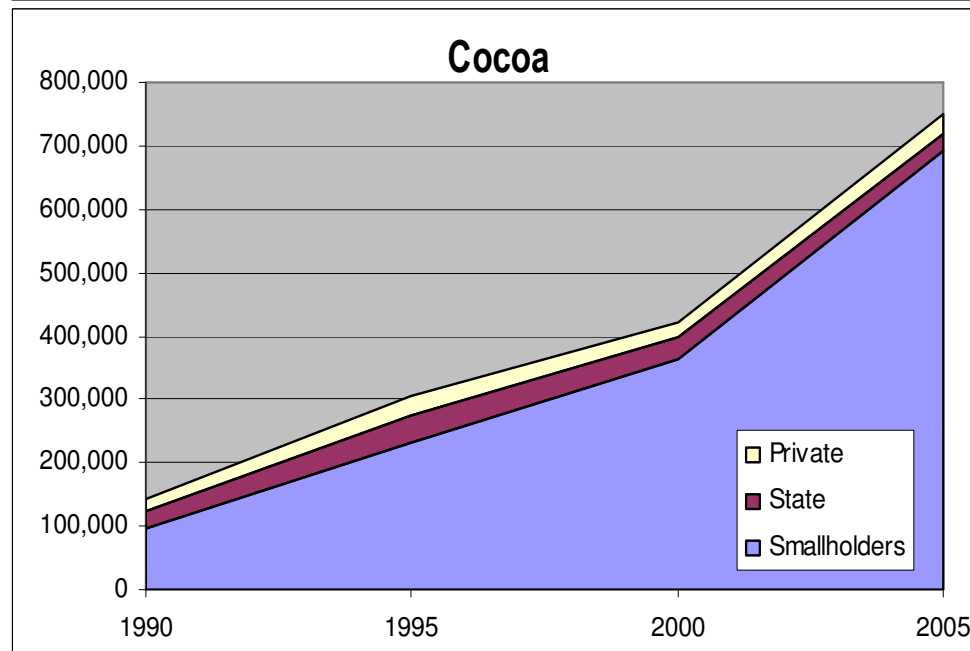
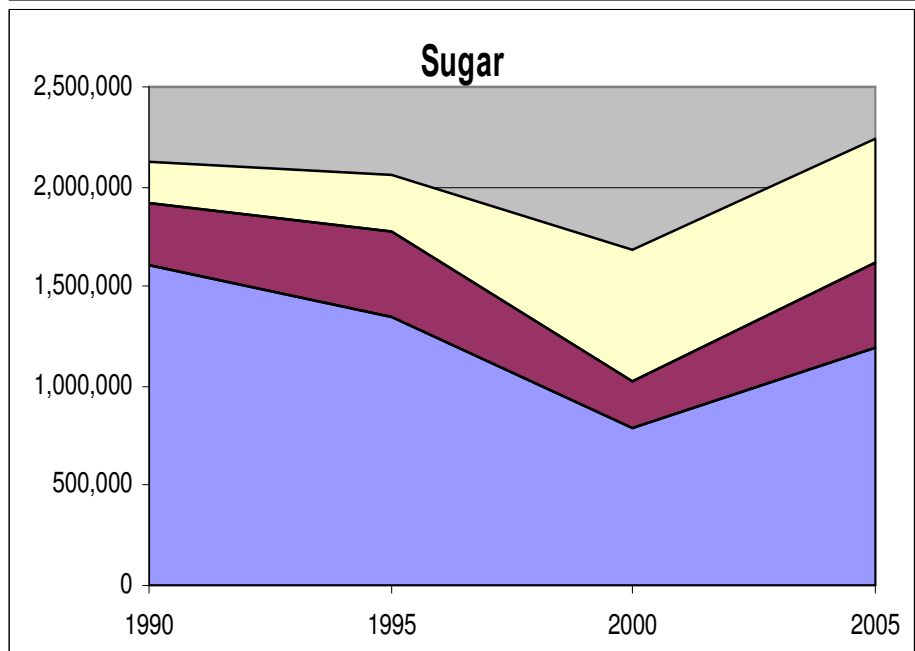
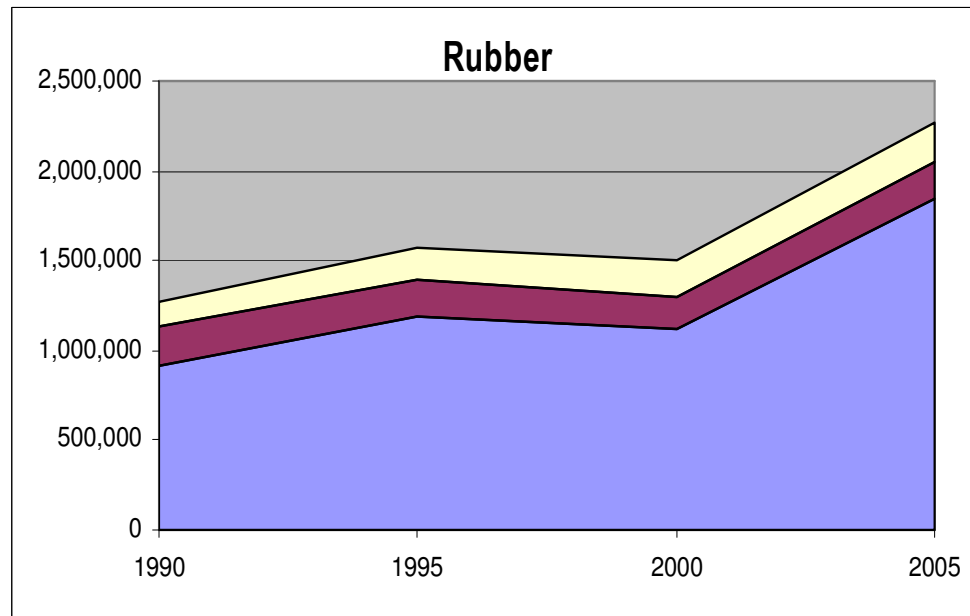
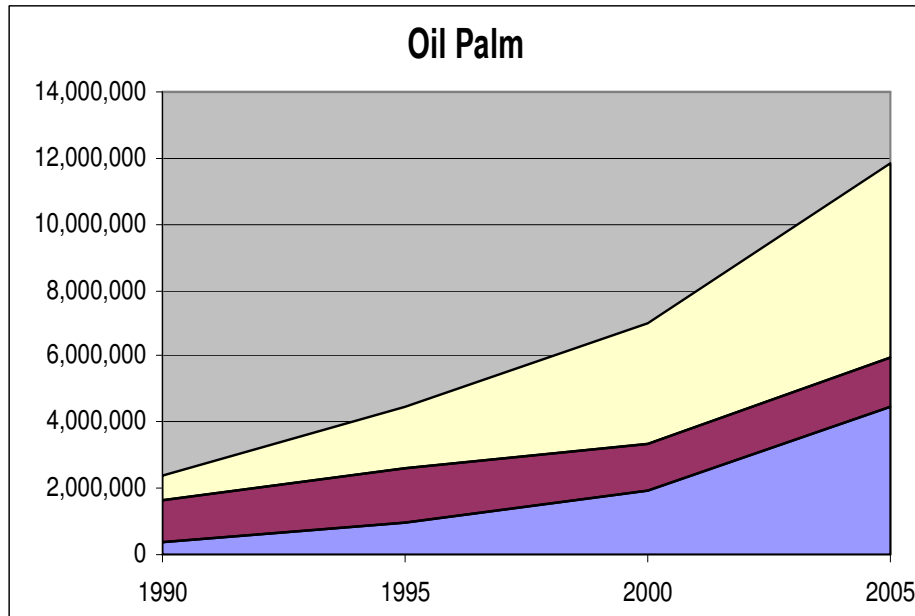
Cash Crops and Plantations

- Palm oil, rubber, coffee, cacao, clove and pepper have contributed to high export earnings.
- Structural problems in downstream and upstream in plantation sectors: dualistic modes of production, association with linear and commando types of management, land conflicts & environmental issues.
- High subsidies in pre-production, but high taxes in post production (to support industrialization policies).
- Sugar was important in old days, but loosing ground recently because of land competition with food crops.

Area of Main Cash Crops (ha)



Production of Main Cash Crops (ton)

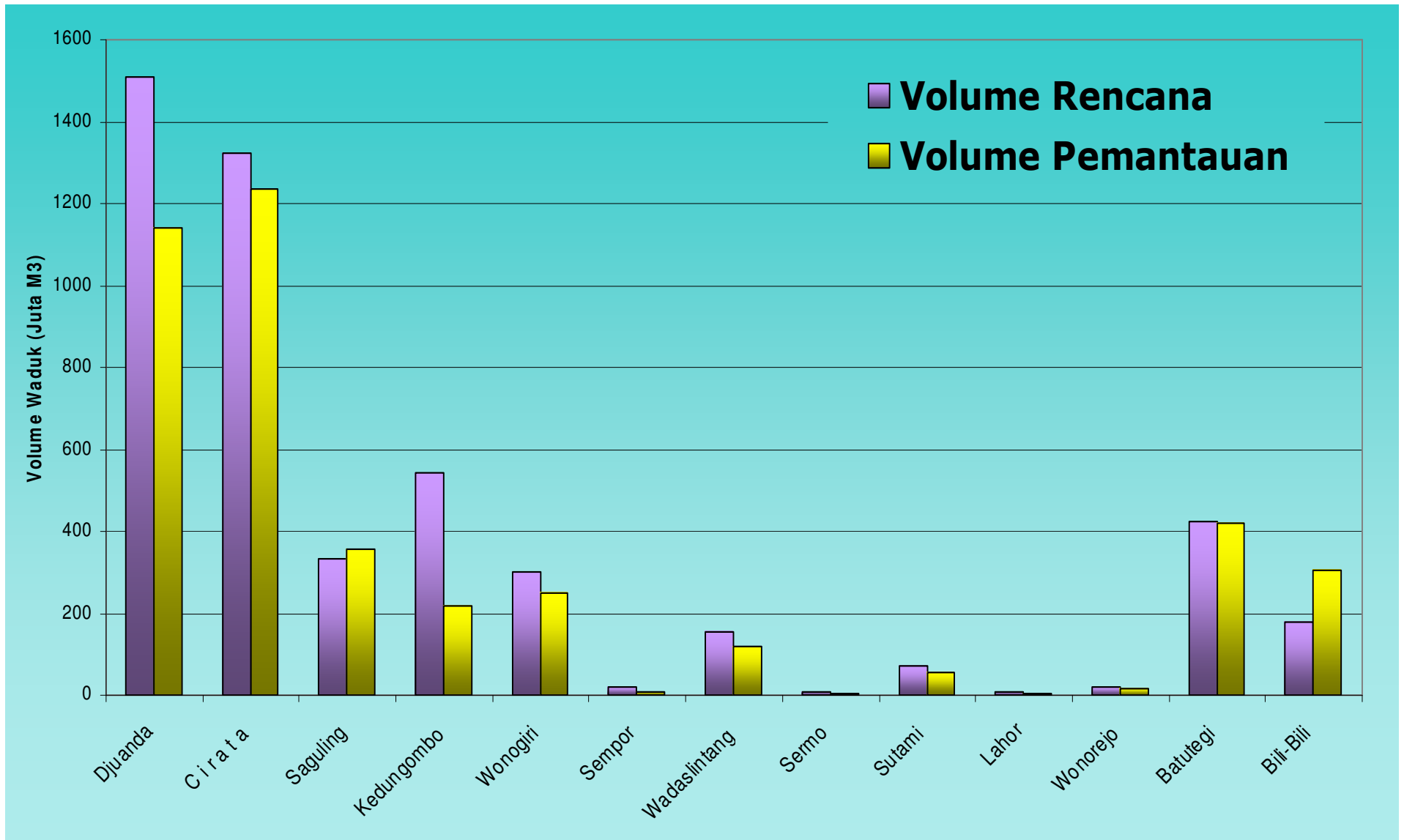


Land Structure and Distribution

	Agric Household (000)	Household Utilizing the Land (000)	Household with <0.5Ha Land (000)
Agric. Census 1993			
- Java	11,671 (100%)	11,564 (99%)	8,067 (69%)
- Off Java	9,116 (100%)	8,954 (98%)	2,737 (30%)
Indonesia	20,787 (100%)	20,518 (99%)	10,804 (52%)
Agric. Census 2003			
- Java	13,583 (100%)	13,262 (98%)	9,842 (72%)
- Off Java	11,286 (100%)	10,799 (96%)	3,411 (30%)
Indonesia	24,869 (100%)	24,061 (97%)	13,253 (53%)

Water Problems in Major Dams

Source: Ministry of Public Works, February 2007



Food and Agribusiness Sector

- The structure remains uneven: 13 million of farm households are small-scale producers (<0.5 ha)
- Most of processed food are produced domestically. About 900 thousand home industry, mostly unbranded and often unpacked food products.
- Large scale food processors have grown significantly, although with heavy intervention in the initial stages.
- Food companies: Indofood, Wingfood, Garudafood are vertically integrated, owning production, processing and distribution facilities.
- Foreign companies affiliate with large scale industries

10 Largest Food Companies

Company	Market Share (%)	Product Range	Ownership
PT Indofood Sukses Makmur	15.6	noodles, flour, cooking oil, margarine, snack food, baby food, food seasonings	Singaporean/ Indonesian
Nestlé SA	4.2	dairy, coffee, tea, beverages, sauces, chocolate, candies, baby food, cereals	Switzerland
Unilever Group	3.2	oils and fats (margarine), ice cream, sauces, dressings and condiments	Anglo Dutch
Friesland Coberco Dairy Foods Holding NV	3.0	dairy products	Netherlands
PT Indomilk	2.8	sweet condensed milk, milk powder, butter, yoghurt	Indonesian
PT Heinz ABC Indonesia	2.3	chili sauce, fruit drink, soy sauces, concentrates ketchup	USA/ Indonesian
Garudafood Group	1.5	peanuts, biscuits, jelly food	Indonesian
PepsiCo Inc	1.5	soft drinks, snack food	USA
Royal Numico NV	1.4	baby food	Netherlands
PT SMART (Sinar Mas)	1.2	crude palm oil, palm kernel, cooking oil margarine etc	Indonesian

Structural Changes in Agri-Food

- Driving factors of the changes: economic transformation increasing urbanization, consumer awareness, supermarket development, globalization, etc.
- Notes: Share of agriculture in the GDP declines from 23% in 1990 to 13% in 2006, but share of agricultural employment declines from 46% in 1990 to 43% in 2006
- Changes in diets (food expenditures) from staple foods to one that include larger share of fruits, fish, meats
- This change in urban demand would influence the production of high-value products in positive directions.

Challenges in Food Processors & Distributors

- How to handle the dual-structure of food processors and distributors: (1) how to link (small-scale) farmers to consumers at domestic & international markets; (2) how to improve relationship between large-scale producers processors distributors with small-scale suppliers;
- Quality of infrastructures (outside Java and Sumatra);
- Archipelagic nature of the country is a challenge by itself
- New decentralization policies (or regional autonomy);
- Labor regulations, tariff barriers, new investment laws,

Domestic Food Consumption Habits

- Total population (2005) is 220 million, ranked the 4th after China, India, & USA. Growth rate is 1.3% per year
- Nearly 60% lives in Java island (7% of total area), or the density is about 1000 people per km².
- Labor force participation rate (LFPR): 68% in 2001-05, but unemployment rate increased from 8.1% to 10.3%.
- Rural non-farm economy (RNFE) increased from 30% in 1977 to 34% in 2002, with some implications;
- Health and nutrition status: up and down, depending on poverty level & achievement of food security policy.

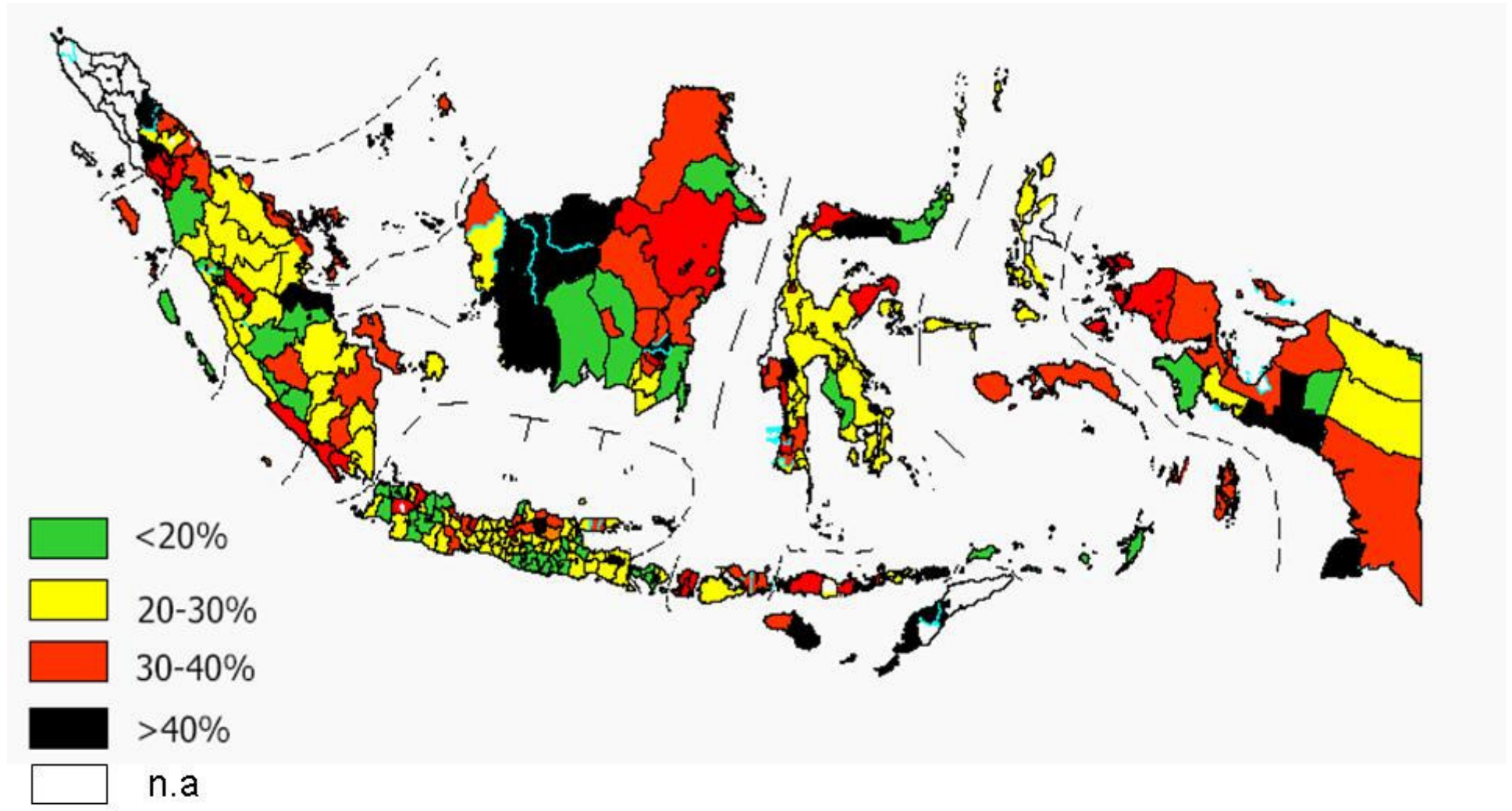
Consumption of Energy and Protein

Selected Indicators	1999	2002	2005
<i>Energy Consumption (kcal/day)</i>			
- without prepared food	1,678.58	1,789.04	1,774.57
	(47.58)	(47.38)	(46.92)
- with prepared food	1,849.36	1,987.13	2,007.65
	(52.42)	(52.62)	(53.08)
<i>Protein Consumption (gram/day)</i>			
- without prepared food	44.05	49.11	50.15
	(47.51)	(47.42)	(46.98)
- with prepared food	48.67	54.45	56.59
	(52.49)	(52.58)	(53.02)

Poverty Incidence, 1996-2007

Year	Total (Million)			Percentage (%)		
	Urban	Rural	U+R	Urban	Rural	U+R
1996	9.6	24.9	34.5	13.6	19.9	17.7
1998	17.6	31.9	49.5	21.9	25.7	24.2
1999	15.7	32.7	48.4	19.5	26.1	23.5
2000	12.3	26.4	38.7	14.6	22.4	19.1
2001	8.6	29.3	37.9	9.8	24.8	18.4
2002	13.3	25.1	38.4	14.5	21.1	18.2
2003	12.2	25.1	37.3	13.6	20.2	17.4
2004	11.4	24.8	36.1	12.1	20.1	16.7
2005	12.4	22.7	35.1	11.4	19.5	16.0
2006	14.3	24.8	39.1	13.4	21.9	17.8
2007	13.6	23.6	37.2	12.5	20.4	16.6

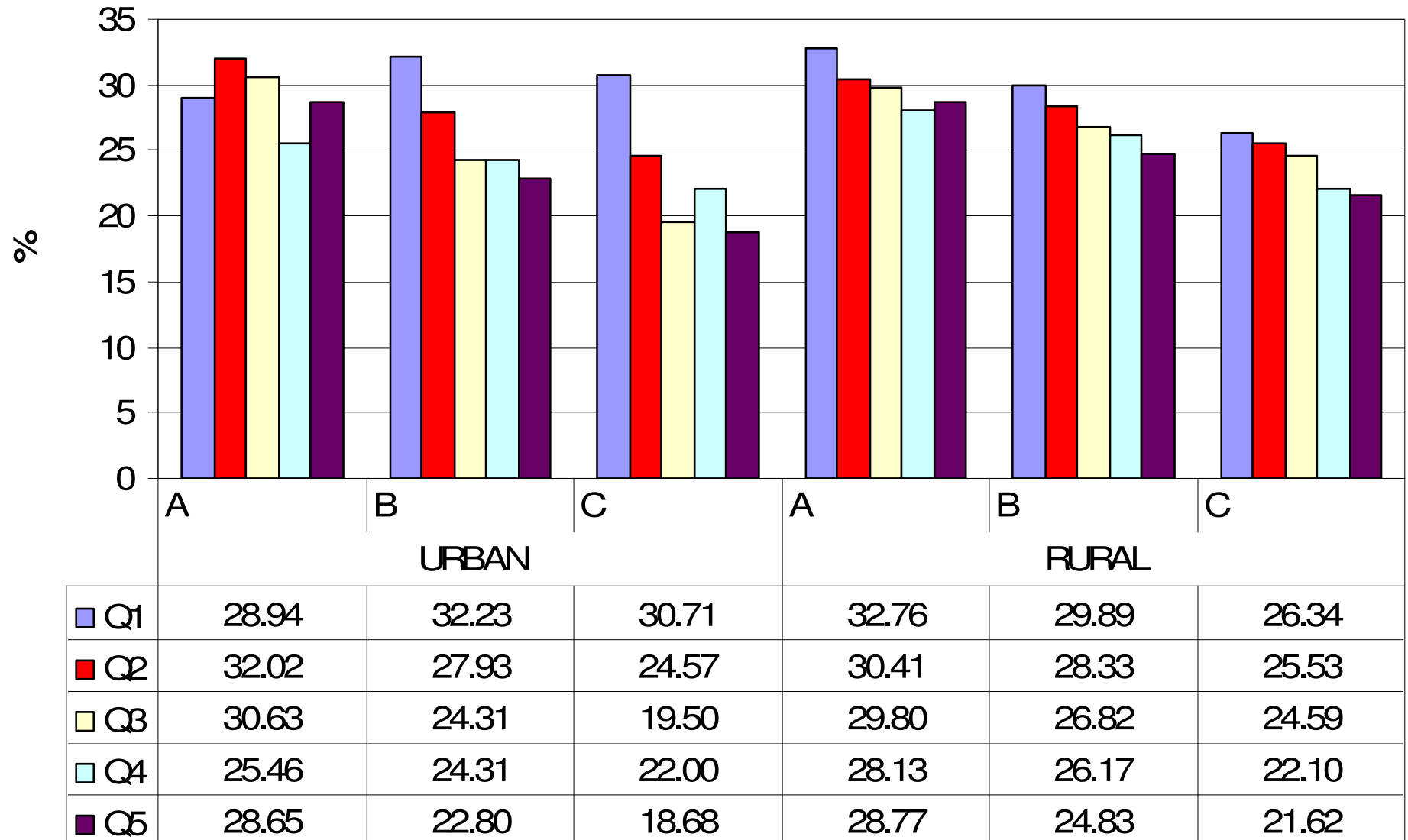
Prevalence of Underweight Children



Source: Atmarita,(2004) "Nutrition Problems in Indonesia".

Underweight Children by Mothers' Education

(A no school, B elementary SD-SMP and C high school)

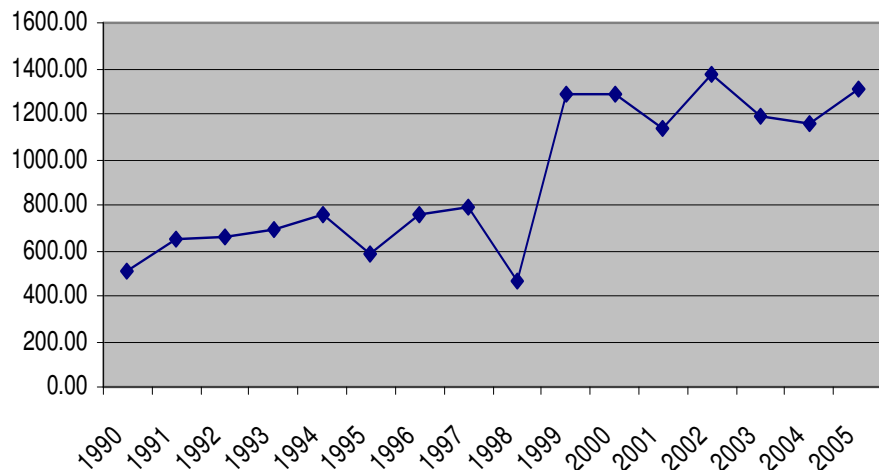


International Trade of Agri-Food

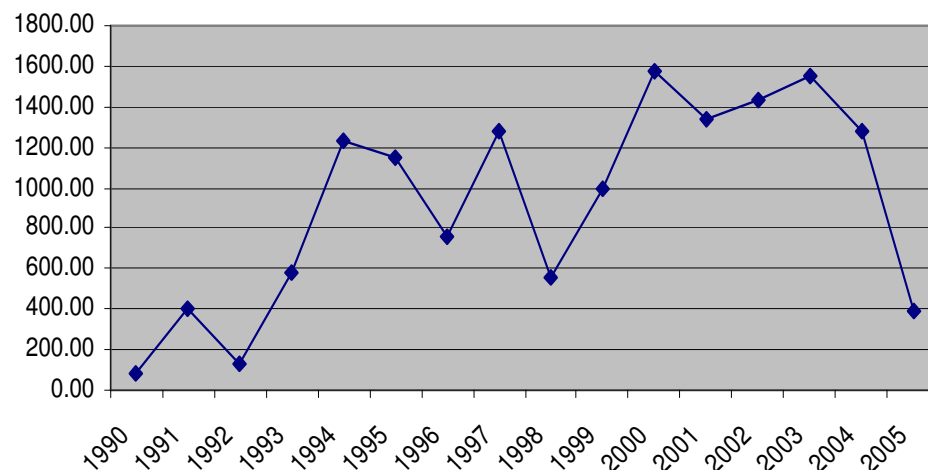
- Indonesia major agri-food exports: CPO, rubber, coffee, coconut, cocoa, pepper, clove and fishery products;
- Indonesia is a leader of G-33 and proposing 4 major special products (SPs): rice, corn, sugar, soybean, for the reasons of food security, poverty, rural livelihood;
- International trade policy has been “quite liberal” shown by average tariff line were reduced from 9.6% in 1998 to 7.2% in 2003, although it is problematic politically.
- Indonesia is fully committed to comply to AFTA (ASEAN Free Trade Agreement). Non-tariff barriers: prohibition, import licensing etc, are not easy to handle.

Special Products (SPs): Import Figures

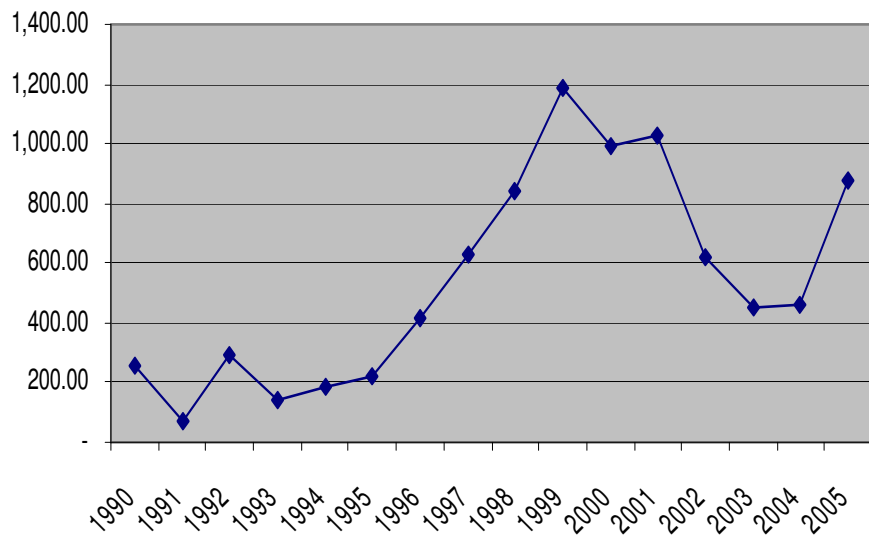
Soybean



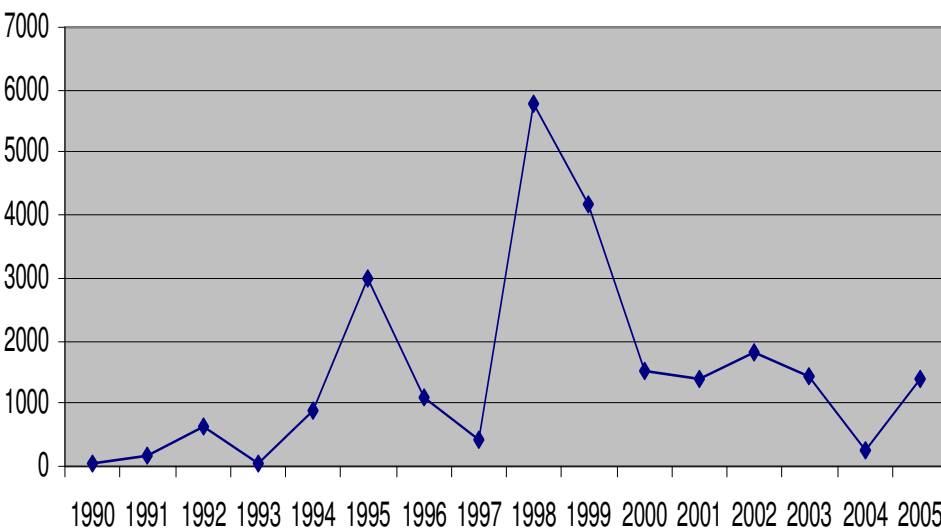
Corn



Sugar



Rice



Trade Liberalization in Indonesia

Selected Indicators	1998	2003
Average Tariff (%)	9.6	7.2
Tariff Group (%)		
➤ 0 -10%	72	83
➤ 15-20%	25	15
➤ 25-30%	2	0.5
➤ >30%	1	1
Liberalization Ratio (%)	97	86
Non-Tariff Barrier (tariff lines)		
➤ Prohibition	7	27
➤ License	185	1,025

Source: Sawit, Husein. 2007. Agriculture Trade Liberalization in Indonesia

Regional and South-South Trade

Possible SP	Developing Country Export	South--South Export
Rice	Yes	Yes
Maize	Yes	Yes
Wheat	Yes	Yes
Sugar	Yes	Yes
Chicken	Yes	Yes
Beef	Yes	Yes
Vegetable oils	Yes (palm/soy-oils)	Yes
Milk and dairy	No ⁽¹⁾	-
Onions	No ⁽¹⁾	-
Potatoes	No ⁽¹⁾	-
Tomatoes	Yes	No ⁽²⁾

Source: Stevens et al. 2005. South-South Trade in Special Products. Geneva: ITSCD

The Way Forward: Policy Agenda

- South-South cooperation between Asia and Latin America should promote information exchanges on rules and regulations affecting trade-related issues.
- Policy agenda should focus on managing different type of transition from subsistence, small-scale into commercial agricultures, especially in the spirits of decentralization in Asia and Latin American countries.
- R&D strategy should encourage active involvement of private sectors, especially in food industry, to promote technological innovation, capacity building for effective food markets in the poorer villages.